

Notice of Allowability

Application No.

10/669,930

Examiner

Gims S. Philippe

Applicant(s)

GALLANT ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment received on October 8, 2007.
2. ☒ The allowed claim(s) is/are 1-4,7,9,11,13-16,20,23,25 and 26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>04/26/04</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Ignatowski on October 15, 2007.

The application has been amended as follows:

In the claims:

Claim 1, line 23, after "wherein said" replace "adder" with **--storage--**;

Claim 20, line 22, after "wherein said" replace "adder" with **--storage--**;

Claim 23, line 2, replace "claim 22" with **--claim 1--**;

Claim 23, line 4, replace "second" with **--storage--**;

Allowable Subject Matter

2. After a further search and a thorough examination of the present application and in light of the prior art made of record, claims 1-4, 7, 9, 11, 13-16, 20, 23, and 25-26 are found to be in condition for allowance.

Reasons for Allowance

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The claims are allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose an apparatus comprising first, second and third circuits, wherein the third circuit is configured to generate a mode signal identifying a best mode among at least four partition modes, (ii) a motion signal conveying at least one motion vector associated with said best mode and (iii) a score signal conveying a score value associated with said best mode all in response to said sum values, wherein said third circuit comprises (i) an adder circuit, configured to generate a plurality of first intermediate values from said sum values, (ii) a storage circuit configured to generate a plurality of second intermediate values from said first, intermediate values as said current block is moved through a search window, (iii) a select circuit configured to generate (a) said mode signal, (b) said motion signal and (c) said score signal all from said second intermediate values, and (iv) a first bias circuit configured to generate a cost value based on all of (a) a quantization parameter and (b) a motion vector magnitude and wherein said adder circuit is further configured to add said cost value to each of said first intermediate values.

The closest prior art (Matsumura et al. US Patent no. 6125144) discloses a similar apparatus, however, Matsumura fails to particularly teach or suggest *"a third circuit configured to generate a mode signal identifying a best mode among at least four partition modes, (ii) a motion signal conveying at least one motion vector associated with said*

best mode and (iii) a score signal conveying a score value associated with said best mode all in response to said sum values, wherein said third circuit comprises (i) an adder circuit, configured to generate a plurality of first intermediate values from said sum values, (ii) a storage circuit configured to generate a plurality of second intermediate values from said first, intermediate values as said current block is moved through a search window, (iii) a select circuit configured to generate (a) said mode signal, (b) said motion signal and (c) said score signal all from said second intermediate values, and (iv) a first bias circuit configured to generate a cost value based on all of (a) a quantization parameter and (b) a motion vector magnitude and wherein said adder circuit is further configured to add said cost value to each of said first intermediate values..” as claimed.

Conclusion

3. Any comments considered necessary by applicant must be submitted no later than the payment of issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled “Comments on Statement of Reasons for Allowance”.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Gims S Philippe
Primary Examiner
Art Unit 2621

GSP

October 15, 2007